ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	RM 7754
	)	
Amendment of Section 73.202(b)	)	
Table of Allotments	)	
FM Broadcast Stations	)	
(Warrenton, Georgia)	)	
	)	

To: Chief, Mass Media Bureau

COMMENTS IN SUPPORT OF
PETITION FOR RECONSIDERATION

Bay Communications, Inc. ("BCI"), permittee of WAAW-FM, Williston, South Carolina, by its attorneys, hereby submits its comments in support of the Petition for Reconsideration ("Petition") filed March 12, 1990 by William P. Eaton, Jr. ("Eaton") in the above-captioned rule making proceeding.[1] As grounds therefor, the following is respectfully stated.

1. On September 28, 1989, BCI was granted a construction permit for a new FM station on Channel 234A to provide first local transmission service to Williston, South Carolina (File No. BPH-880725MG) (copy of construction permit attached hereto as Exhibit 1). The station has been assigned call sign WAAW by the Commission and is authorized to operate at an effective radiated power ("ERP") of 1.30 kW with a radiation center located at 153 meters above average terrain.

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[1] Public Notice of Eaton's Petition was published in the Federal Register on April 27, 1990. See 55 FR 17818 (April 27, 1990). Pursuant to Section 1.4(b) of the Commission's Rules, BCI's Comments are timely filed.

2. On October 2, 1989, BCI filed an application for a minor modification of its construction permit (copy attached hereto as Exhibit 2). The application requested a change in antenna site and operation at the equivalent of 6.0 kW ERP (2.11 kW at 170.7 meters above average terrain). This modification is consistent with the new rules adopted in Amendment of Part 73 of the Rules to Provide for an Additional FM Station Class (3) and to Increase the Maximum Transmitting Power for Class A FM Stations, 4 FCC Rcd 6375 (1989) ("Second Report and Order"). The modification application is pending before the Commission.

3. By letter dated February 7, 1990, the Commission returned Eaton's petition for rule making to allot Channel 232A to Warrenton, Georgia, stating that the Warrenton proposal was short-spaced to a "counterproposal" to add Channel 234A to Gibson, Georgia. The "counterproposal" was submitted on October 13, 1989 as an alternative to a proposal to substitute Channel 278C3 for Channel 278A at Greenwood, South Carolina. See MM Docket No. 89-404. However, as Eaton pointed out in his Petition, the counterproposal to allot a facility to Gibson was for the allotment of Channel 278A to Gibson as its first local service. Indeed, no applicant has formally proposed to allot Channel 234A to Gibson; rather, this alternative appears to be an internal FCC solution. See Petition, p.2 and Attachment 2.

4. Allotment of Channel 234A to Gibson will preclude grant of BCI's minor modification application. As demonstrated in the attached statement of John J. Mullaney, BCI's consulting engineer,

BCI would not be able to operate its Williston facility at 6 kW if Channel 234A were allotted to Gibson because it would be short-spaced to the Gibson Channel 234A allotment. See Exhibit 3; see also Petition, p.8 and Attachment 4. Furthermore, at its current site, the Williston permit is short-spaced to pending applications for a new FM station on Channel 234A at Sumter, South Carolina. See Hearing Designation Order, MM Docket No. 90-108, DA 90-306, released March 19, 1990. Had the Commission considered either the Williston permit or the application to modify the Williston permit, this unfortunate conflict might never have developed to this point.

5. Moreover, allotment of Channel 234A to Gibson would be patently unfair to BCI. In the first place, BCI's application was filed on October 2, 1989, some eleven days before Gibson was proposed (albeit on Channel 278A), and more than one month before the November 16, 1989 comment period for the Greenwood rule making established in MM Docket No. 89-404, wherein the Commission recognized the Gibson petition for rule making as a counterproposal. Given that the FCC's internal decision to change the Gibson allotment from Channel 278A to Channel 234A was not articulated until February 7, 1990 -- nearly four months after BCI filed for its modification -- BCI had no prior interest in the Greenwood-Gibson rule making.

6. The most significant aspect of the Commission's internal solution is the proposed allotment of a channel without providing an opportunity for public comment. While it is one thing for the Commission to locate alternative frequencies when the public

interest mandates, it is quite another to do so to the detriment of a Commission permittee who has not had an opportunity to participate, especially when its rights are at issue. The Commission cannot countenance such a denial of the basic due process rights as set forth in the notice and comment procedures of the Administrative Procedure Act. See Sangamon Valley Television Corp. v. U.S., 269 F. 2d 221 (D.C. Cir. 1959).

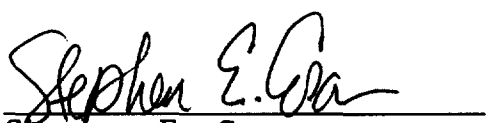
7. For these reasons, BCI fully supports Eaton's Petition. If the Commission acts in accordance with Eaton's Petition, not only would BCI be permitted to operate at 6 kW, but Warrenton would have a second local service and Gibson, operating on Channel 278A, would have its first local service. As the Commission has recognized, operation of Class A stations at 6 kW would significantly improve the ability of Class A stations to serve the listening public, and thus promotes the public interest. See Second Report and Order, 4 FCC Rcd at 6380. Eaton's Petition supports this policy and is to be preferred to an upgrade to Channel 278C3 at Greenwood and allotment of Channel 234A to Gibson -- the latter of which was determined by FCC fiat and without the opportunity for public comment.

WHEREFORE, in light of the foregoing, Bay Communications, Inc. respectfully requests that the Petition for Reconsideration of William P. Eaton, Jr. be granted.

Respectfully submitted,

BAY COMMUNICATIONS, INC.

By: 
Robert J. Rini

By: 
Stephen E. Coran

Its Counsel

Brown Finn & Nietert, Chartered
1920 N Street, N.W., Suite 660
Washington, D.C. 20036
(202) 887-0600

DATED: May 15, 1990

EXHIBIT 1

wcnl
Williston

LAW OFFICES
BROWN FINN & NIETERT, CHARTERED
SUITE 660
1920 N STREET, N.W.
WASHINGTON, D.C. 20036

TEL (202) 887-0600
FAX (202) 457-0126

October 2, 1989

RECEIVED
OCT 02 1989
FCC SECTION

Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Bay Communications, Inc.
FM Permittee
Williston, South Carolina

Dear Ms. Searcy:

Bay Communications, Inc., by counsel, hereby submits the attached modification application to its authorized facilities for the above referenced FM station.

Attached hereto is a check in the amount of $500.00 in payment of the FCC filing fee.

If there are any questions concerning this matter or if additional information is needed, please contact the undersigned.

Respectfully submitted,

Robert J. Rini
Counsel to Bay Communications, Inc.

deral Communications Commission
Washington, D. C. 20554

FCC 301

Approved by OMB
3060-0027
Expires 2/28/92
See Page 25 for information regarding public burden estimate

APPLICATION FOR CONSTRUCTION PERMIT FOR COMMERCIAL BROADCAST STATION

For COMMISSION Fee Use Only	FEE NO:	For APPLICANT Fee Use Only Is a fee submitted with this application? [X] Yes [ ] No
	FEE TYPE:	If fee exempt (see 47 C.F.R. Section 1.1112), indicate reason therefor (check one box): [ ] Noncommercial educational licensee [ ] Governmental entity
	FEE AMT:	
	ID SEQ:	FOR COMMISSION USE ONLY FILE NO.

Section I - GENERAL INFORMATION

1. Name of Applicant	Send notices and communications to the following person at the address below:
Bay Communications, Inc.	Name Robert J. Rini Brown, Finn & Nietert, Chartered
Street Address or P.O. Box P.O. 291 Yarmouth Road (US Route 1)	Street Address or P.O. Box 1920 N Street, N.W., Suite 660
City: Freeport; State: ME; ZIP Code: 04032	City: Washington; State: DC; ZIP Code: 20036
Telephone No. (Include Area Code) (800) 635-SELL	Telephone No. (Include Area Code) (202) 887-0600

2. This application is for: [ ] AM [x] FM [ ] TV

(a) Channel No. or Frequency	(b) Principal Community	City	State
234A		Williston	SC

(c) Check one of the following boxes:

- [ ] Application for NEW station
- [ ] MAJOR change in licensed facilities; call sign: _____
- [ ] MINOR change in licensed facilities; call sign: _____
- [ ] MAJOR modification of construction permit; call sign: _____
  File No. of construction permit: _____
- [X] MINOR modification of construction permit; call sign: Not Assigned
  File No. of construction permit: BPH-880725MG
- [ ] AMENDMENT to pending application; Application file number: _____

NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

3. Is this application mutually exclusive with a renewal application? [ ] Yes [X] No

If Yes, state:

Call letters	Community of License	
	City	State

JOHN H. MULLANEY, P.E.
JOHN J. MULLANEY

MULLANEY ENGINEERING, INC.
9049 SHADY GROVE COURT
GAITHERSBURG, MD 20877

301 921-0115

ENGINEERING EXHIBIT EE-2:

BAY COMMUNICATIONS, INC.
WILLISTON, SOUTH CAROLINA
Ch. 234A 2.11 KW 170.7 M HAAT
(560 FEET)

SEPTEMBER 29, 1989

ENGINEERING STATEMENT IN SUPPORT OF
AN APPLICATION FOR
MODIFICATION OF CONSTRUCTION PERMIT
BPH 880725MG
CHANGE OF SITE & OPERATION AT EQUIVALENT OF 6 KW

ENGINEERING EXHIBIT EE-2:

BAY COMMUNICATIONS, INC.
WILLISTON, SOUTH CAROLINA
Ch. 234A 2.11 KW 170.7 M HAAT
(560 FEET)

TABLE OF CONTENTS:

MULLANEY ENGINEERING, INC.

DECLARATION

John J. Mullaney, declares and states that he is a graduate electrical engineer with a B.E.E. from Catholic University, and his qualifications are known to the Federal Communications Commission, and that he is an associate engineer in the firm of Mullaney Engineering, Inc., and that firm has been retained by Bay Communications, Inc., to prepare an application for modification of C.P.

All facts contained herein are true of his own knowledge except where stated to be on information or belief, and as to those facts, he believes them to be true. I declare under penalty of perjury that the foregoing is true and correct.

John J. Mullaney

Executed on the 29th day of September 1989.

Section V-B - FM BROADCAST ENGINEERING DATA	FOR COMMISSION USE ONLY File No. _____ ASB Referral Date _____ Referred by _____

Name of Applicant

Bay Communications, Inc.

Call letters *(if issued)*	Is this application being filed in response to a window? ☐ Yes ■ No
Not Yet Issued	If Yes, specify closing date: _____

Purpose of Application: *(check appropriate box(es))*

- ☐ Construct a new (main) facility
- ☐ Construct a new auxiliary facility
- ■ Modify existing construction permit for main facility
- ☐ Modify existing construction permit for auxiliary facility
- ☐ Modify licensed main facility
- ☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

- ■ Antenna supporting-structure height
- ■ Effective radiated power 6 kW Equivalent
- ■ Antenna height above average terrain
- ☐ Frequency
- ■ Antenna location
- ☐ Class
- ☐ Main Studio location
- ☐ Other *(Summarize briefly)*

File Number(s) BPH 880725MG

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
234	Williston	Barnwell	SC

Class *(check only one box below)*

■ A ☐ B1 ☐ B ☐ C3

☐ C2 ☐ C1 ☐ C

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark. 2.2 Miles West of Windsor, South Carolina (Aiken County)

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	33°	28'	33"	Longitude	81°	32'	57"

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ Yes ■ No

If Yes, give call letter(s) or file number(s) or both. _____

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

_____

4. Does the application propose to correct previous site coordinates? ☐ Yes ■ No
If Yes, list old coordinates.

Latitude ° ' "	Longitude ° ' "

5. Has the FAA been notified of the proposed construction? ■ Yes ☐ No
If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available. Exhibit No. --

Date 09/29/89 Office where filed Southern Region

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	None		
(b)			

7. (a) Elevation: *(to the nearest meter)*

(1) of site above mean sea level;	420'	128	meters
(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and	499'	152	meters
(3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)]	919'	280	meters

(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical

(1) above ground	478'	146	meters (H)
	478'	146	meters (V)
(2) above mean sea level [(a)(1) + (b)(1)]	898'	274	meters (H)
	898	274	meters (V)
(3) above average terrain	560'	171	meters (H)
	560'	171	meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator. Exhibit No. EE-2

9. Effective Radiated Power:
(a) ERP in the horizontal plane 2.11 kw (H*) 2.11 kw (V*)

(b) Is beam tilt proposed? ☐ Yes ■ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field. Exhibit No. --

_____ kw (H*) _____ kw (V*)

*Polarization

10. Is a directional antenna proposed? ☐ Yes ■ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field. Exhibit No. --

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.315(a) and (b)? ■ Yes ☐ No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service. Exhibit No. --

12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal? ■ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125. Exhibit No. --

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207? 6 kW ■ Yes ☐ No

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.213 apply? DNA ☐ Yes ☐ No

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers. Exhibit No. --

(d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose. Exhibit No. --

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following: Exhibit No. --

(1) Protected and interfering contours, in all directions (360°), for the proposed operation.
(2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.
(3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
(4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(5) The official title(s) of the map(s) used in the exhibits(s).

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *(except citizens band or amateur)* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference? ☐ Yes ■ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. *(See 47 C.F.R. Sections 73.315(b), 73.316(e) and 73.318.)* Exhibit No. --

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No. EE-2

Figure 1

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. EE-2

Figure 2

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 0.16 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 2,512 sq. km. Population 68,376

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. --

DNA

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

■ Linearly interpolated 30-second database ☐ 7.5 minute topographic map

(Source: NGDC)

☐ Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 3.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
CITY * 120°	168.8	16.3	28.2
0	165.2	16.1	27.8
45	169.8	16.3	28.2
90	181.1	16.9	29.1
135	169.6	16.3	28.2
180	182.4	16.9	29.1
225	186.1	17.1	29.5
270	165.2	16.1	27.8
315	145.8	15.0	26.4

*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement *(See 47 C.F.R. Section 1.1301 et seq.)*

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ■ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311. Exhibit No. --

If No, explain briefly why not. See Exhibit EE-2

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name *(Typed or Printed)*	Relationship to Applicant *(e.g., Consulting Engineer)*
John J. Mullaney	Consulting Engineer
Signature	Address *(Include ZIP Code)*
John J. Mullaney	Mullaney Engineering, Inc. 9049 Shady Grove Court Gaithersburg, MD 20877
Date	Telephone No. *(Include Area Code)*
09/29/89	(301) 921-0115

ENGINEERING EXHIBIT EE-2:

BAY COMMUNICATIONS, INC.
WILLISTON, SOUTH CAROLINA
Ch. 234A 2.11 KW 170.7 M HAAT
(560 FEET)

NARRATIVE STATEMENT:

I. GENERAL:

This engineering statement has been prepared on behalf of Bay Communications, Inc., permittee of a new FM station on Ch. 234A at Williston, S.C. The purpose of this statement is to request a modification of their Construction Permit (BPH 880725MG) to build a new FM broadcast facility on Channel 234A at Williston, South Carolina, which will operate with an ERP of 2.11 KW and an HAAT of 170.7 Meters (560 Feet). The application requests a change of site in order to permit operations that are equivalent to 6 KW at 328 feet.

The application is not a major environmental action, as defined by Section 1.1307 of the Commission's Rules. The proposed facility is in full compliance with the FCC / ANSI Radiation Guidelines.

Answers to questions contained in F.C.C. Form 301, Section V-B, are incorporated in the following paragraphs and figures.

II. ENGINEERING DISCUSSION:

A. Proposed Location:

The applicant proposes to locate the tower 2.2 miles west of Windsor, S.C. Figure 1 is a Topographic map showing the proposed site. The geographic coordinates are:

Latitude: 33° 28' 33"
Longitude: 81° 32' 57"

The city of license, Williston, South Carolina, is located approximately 8.5 miles southeast of the proposed site. The Southern Regional Office of the FAA was notified of this proposal on September 29, 1989. Figure 1-A is an Aeronautical map showing the proposed site.

B. Antenna System and Tower:

A dual polarized 3-bay FM antenna will be side mounted near the top of a new tower with an overall height of 152.1 Meters (499 Feet) AGL (includes lighting). The antenna will have a center of radiation of 145.7 Meters (478 Feet) AGL or 273.7 Meters (898 Feet) AMSL. Figure 3 is a sketch of the proposed tower. The antenna has a non-directional power gain of 1.5588 H/V.

The antenna will be fed by 152.4 Meters (500 Feet) of 1-5/8" coaxial cable, with a rated efficiency of 76.7 percent for this length.

C. Transmitter:

The applicant plans to install a type accepted 2.5 KW FM transmitter. The transmitter will be operated at 1.77 KW which is within its rated power.

D. **Effective Radiated Power:**

Giving consideration for the maximum antenna gain, transmitter power and line loss, the maximum Effective Radiated Power is 2.11 KW for the Horizontal and 2.11 KW for the Vertical Component.

A Class-A FM station is restricted to a maximum of 6 KW (ERP) up to a maximum Height Above Average Terrain (HAAT) of 100 Meters. This proposal will operate with an HAAT that exceeds the maximum and consequently must reduce its ERP in order to obtain equivalent coverage within the 1.0 mV/M contour.

Current F.C.C. policy permits stations that are beyond 322 kilometers from the Mexican or Canadian Borders to use the "new" F(50,50) curves to determine what reduced power at their HAAT will provide the equivalent maximum 1.0 mV/M coverage allowed.

Using the curve, it was determined that 2.11 KW at an HAAT of 170.7 Meters is equivalent to the maximum normally allowed.

E. **Channel Allocation:**

The proposed site is in accordance with the required mileage separations as set forth 6 KW operation in Section 73.207(a). Figure 4 is a channel allocation study from the proposed site.

F. **Terrain Profile Data & Coverage:**

Terrain profile data was extracted from NGDC 30 Second Digitized Terrain Data Base provided out of Boulder, Colorado. Twenty-four bearings (every 15 degrees) were used to obtain the proposed coverage data. The standard eight bearings (every 45 degrees) were used to obtain the

proposed HAAT.

The predicted service contours, as shown in Figure 2 of the attached report, were computed using a mathematical model adapted for computer use of the data shown in Figure 1 of Section 73.333 (replacement of the Commission's Rules, the so-called "new" F(50,50) curves). This is the Commission's computer program TV FM FS REPORT RS-76-01, dated January 1976.

Figure 2-A & 2-B are tabulations of the distances to the 70 dBu (3.16 mV/M - City Grade) & 60 dBu (1.0 mV/M - Primary) contours in Metric Units (Meters/Kilometers) and in the traditional English Units (Feet/Miles) respectively.

G. Terrain Profile to City of License:

The N-120-E radial is the direct path to the City of License. From the proposed site the 3.16 mV/M City Grade Contour will completely encompass the City of License without major terrain obstruction.

H. Coverage Area and Population:

The area contained within the 60 dbu (1.0 mV/m) contour is 2,512 square kilometers (970 square miles) and has been computed mathematically.

The population within this contour is 68,376 persons and was obtained through a computerized analysis of the census designated places population data contained in the 1980 Census.

I. FM Blanketing Contour:

The applicant recognizes its obligation to resolve related interference complaints for a one year period

within its 115 dBu "FM Blanketing Contour" as required by Section 73.318 of the FCC Rules.

The radius around the base of the tower in which Blanketing interference is possible is fairly small (see Figure 2-A) and is in a sparsely populated area. Given the height of the tower proposed, no problems are anticipated.

J. Other Services in Area:

There are NO known AM Broadcast Stations within 3.2 kilometers of the proposed site.

There are no known transmission facilities within 60 meters (197 feet) of the proposed antenna.

There are no other known FM or TV transmitters within 10 kilometers (6.2 miles) of the proposed site, however, based on the type of transmitter proposed, and the frequency & power involved no intermodulation interference problems with existing transmitting facilities is expected. In the unlikely event some problems would occur, the applicant will investigate and correct such cases in accordance with the Commission's Rules.

K. Environmental Assessment Statement:

The applicant believes its proposal will not significantly affect the environment since it does not meet any of the criteria specified in Section 1.1307 of the rules. Specifically the proposed facility:

1. Will NOT be located in an officially designated wilderness area.
2. Will NOT be located in an officially designated wildlife preserve.

3. Will NOT affect districts, sites, buildings, structures or objects, significant in American history, architecture, archeology or culture, that are listed in the National Register of Historic Places or are eligible for such listing.
4. Will NOT be located in a floodplain.
5. Will NOT result in construction that will involve a significant change in the surface features (eg. wetland fill, deforestation or water diversion).
6. Will NOT involve the use of high intensity white lights on a structure located in a residential neighborhood, as defined by the applicable zoning laws.
7. Will NOT involve the exposure of workers or the general public to levels of radiofrequency radiation in excess of the "Radio Frequency Protection Guide" recommended by ANSI (C95-1-1982).

The following is a more detailed discussion of this protection standard:

a. National Environmental Policy Act of 1969:

In 1969, Congress enacted the National Environmental Policy Act (NEPA), which requires the FCC to evaluate the potential environmental significance of the facilities it regulates and authorizes. Human exposure to Radio Frequency (RF) radiation has been identified as an issue the FCC must consider.

Beginning with the filing of applications after January 1, 1986, broadcast stations will be required to "certify compliance" with FCC prescribed guidelines on human exposure to RF radiation. The FCC is using as its processing guidelines, the American National Standards Institute's (ANSI) RF radiation protection guides (ANSI C95.1-1982). These exposure limits are expressed in terms of milli-watts per square centimeter.

These exposure limits are time averaged over any six minute period and vary depending upon the frequency involved:

Frequency Range (MHz)			**Power Density (mW/sq.cm)**	
0.3	to	3	100	AM
3	to	30	$900/(Freq^2)$	
30	**to**	**300**	**1.0**	**VHF TV & FM**
300	to	1,500	Freq/300	UHF TV
1500	to	100,000	5.0	

(same as ANSI standard)

The applicant recognizes that compliance with the above criteria at sites involving multiple AM, FM and/or TV facilities is based upon the contributions of all such facilities. At the site discussed in this application, the only facility that will exist is the proposed FM facility.

FM BROADCAST STATIONS

For FM Broadcast Stations the following formula is used:

$$D = \frac{SQRT(F^2 * [HERP + VERP])}{1.667 * SQRT(PD) * 3.2808}$$

Where:

D = the closest distance in meters that a human should come to an operating antenna (to obtain feet multiply by 3.2808)
F = typical relative field factor in downward direction (F = 1 is worst case main lobe)
HERP = Horizontal ERP in watts (above a dipole)
VERP = Vertical ERP in watts (above a dipole)
PD = highest Power Density in milli-watts/cm^2
SQRT = Square Root
Freq = Frequency in mega-cycles/sec. (mHz)

The vertical radiation pattern of the FM antenna specified in this application is very narrow and therefore the power density as seen by an observer on the ground near the base of the tower will be less than 10 percent of the total ERP or 0.2 KW.

The application of the above equation (assuming maximum ERP), in our case, for a frequency of 94.7 MHz and a Power Density of 1.0 milli-watts results in a minimum distance of 11.9 meters (39 feet) from the antenna. Inasmuch as the lowest element on the proposed antenna will be approximately 140.2 meters (460 feet) above ground level, it is self-evident that no hazard from radiation will exist to persons at ground level. At approximately 2 meters above the ground and assuming maximum downward radiation the proposed FM facility contributes 0.0074 of

the ANSI standard. With regard to people which need to climb the tower, the tower will be marked by appropriate warning signs to insure safety.

III. SUMMARY:

Bay Communications, Inc., requests a modification of its construction permit to build a new FM facility on Channel 234A at Williston, South Carolina. The modification proposes a change in site so as to comply with the new 6 KW spacing requirements. This engineering proposal is in full compliance with the Commission's Rules.

September 29, 1989.

John J. Mullaney